

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/041396 A3(51) International Patent Classification:
F03B 13/00 (2006.01) H02P 9/04 (2006.01)
F03B 13/10 (2006.01)(21) International Application Number:
PCT/US2004/035200

(22) International Filing Date: 22 October 2004 (22.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/513,474 22 October 2003 (22.10.2003) US
60/549,380 2 March 2004 (02.03.2004) US

(71) Applicant and

(72) Inventor: SCHERZER, Paul, L. [US/US]; 130 Spring Park Drive, Suite 200, Midland, TX 79705 (US).

(74) Agent: GARRED, John, X.; Tucker Ellis & West LLP, 925 Euclid Avenue, 1150 Huntington Building, Cleveland, OH 44115-1475 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

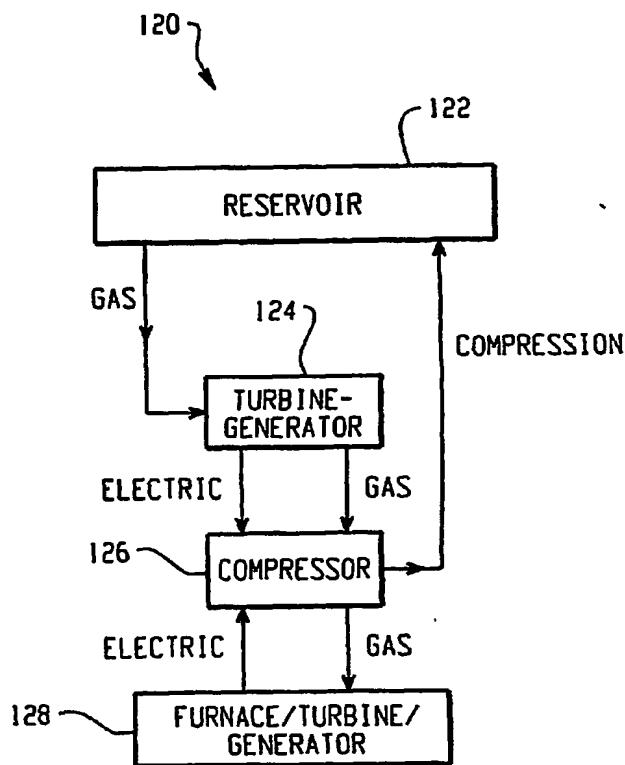
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR GENERATING ELECTRICITY UTILIZING NATURALLY OCCURRING GAS



(57) Abstract: A system and method for using natural gas to generate electricity. Natural gas under pressure is withdrawn from a well and passed to a turbine. The pressure of the natural gas acts on a turbine fan that in turn drives a generator to generate electricity. The natural gas used to drive the turbine fan suitably is reused to drive another turbine and generator, thereby producing additional electricity.

WO 2005/041396 A3



(88) Date of publication of the international search report:
8 February 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/35200

A. CLASSIFICATION OF SUBJECT MATTER
IPC: F03B 13/00(2006.01),13/10(2006.01);H02P 9/04(2006.01)

USPC: 290/43
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 290/43

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

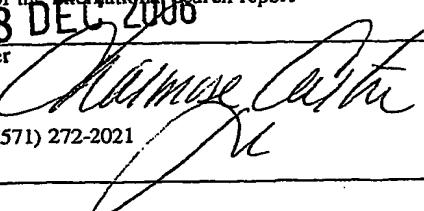
C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,993,913 B2 (KOBAYASHI et al.) 07 February 2006 (07.02.2006), complete document.	1-8
Y. A	US 6,374,591 B1 (JOHNSON et al.) 23 April 2002 (23.04.2002), complete document.	2-4 and 6-8
A	US 6,089,028 A (BOWEN et al.) 18 July 2000 (18.07.2000), complete document.	1-8
A	US 5,457,951 A (JOHNSON et al.) 17 October 1995 (17.10.1995), complete document.	1-8
A	US 4,995,234 A (KOOY et al.) 26 February 1991 (26.02.1991), complete document.	1-8
A	US 4,599,868 A (LUTJENS et al.) 15 July 1986 (15.07.1986), complete document.	1-8
A	US 4,479,350 A (NEWTON et al.) 30 October 1984 (30.10.1984), complete document.	1-8

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 14 September 2006 (14.09.2006)	Date of mailing of the international search report 18 DEC 2006
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Pedro J. Cuevas Telephone No. (571) 272-2021 

INTERNATIONAL SEARCH REPORT

International application No. PCT/US04/35200	
---	--

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,437,312 A (NEWTON et al.) 20 March 1984 (20.03.1984), complete document.	1-8
A	US 4,372,124 A (NEWTON et al.) 08 February 1983 (08.02.1983), complete document.	1-8
A	US 4,036,028 A (MANDRIN) 19 July 1977 (19.07.1977), complete document.	1-8
A	US 3,892,103 A (ANTONELLI) 01 July 1975 (01.07.1975), complete document.	1-8
A	US 3,726,085 A (ARENSON) 10 April 1973 (10.04.1973), complete document.	1-8
A	US 3,479,832 A (J. A. SARSEN et al.) 25 November 1969 (25.11.1969), complete document.	1-8
A	US 3,183,666 A (R. G. JACKSON) 18 May 1965 (18.05.1965), complete document.	1-8
X, A —	US 3,068,659 A (W. H. MARSHALL, JR.) 18 December 1962 (18.12.1962), complete document.	1 and 5 — 2-4 and 6-8
Y, A	US 2,975,607 A (W. W. BODLE) 21 March 1961 (21.03.1961), complete document.	1-8
A	US 2006/0174627 A1 (McQUIGGAN) 10 August 2006 (10.08.2006), complete document.	1-8
A	US 2006/0076076 A1 (DARLING, IV et al.) 13 April 2006 (13.04.2006), complete document.	1-8